# TRI-PARTY AGREEMENT

| Change Notice Number TPA-CN- 405 | TPA CHANGE NOTICE FORM | Date: 11/15/2010 |
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| Document Number, Title, and Revision: *Sampling and Analysis Plan for the 100-K Decision Unit Remedial Investigation/Feasibility Study,* DOE/RL-2009-41, Rev. 0 (As amended by TPA-CN-384, October 6, 2010) | | Date Document Last Issued: October 23, 2009 |
| Originator: Art Lee | | Phone: 372-1763 |

**Description of Change:**

Modify Sections 3.5.1 and 3.5.2.1 as shown in the attached pages.

- "Well Drilling and Completion Procedures" in Section 3.5.2.1 modified to identify that well #9 will be constructed with 4 inch PVC pipe instead of stainless steel. (Attachment)

Briant Charboneau (**DOE**) and Chris Guzzetti (**Lead Regulatory Agency**) agree that the proposed change modifies an approved workplan/document and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, *Documentation and Records,* and not Chapter 12.0, *Changes to the Agreement.*

Note: Include affected page number(s)

**Justification and Impacts of Change:**

Commitments with D&D of reactor and support facilities in 100 KE include D&D of the 105KE reactor north of well #9, D&D of 165KE south of well #9 and the pipelines between the two facilities. D&D is currently being performed on 105KE and D&D of the other structures are planned to be completed this fiscal year. Lay back for this D&D and excavation work encroaches over the location for well #9 and will need the well to be decommissioned.

Drilling and constructing the well as a temporary PVC well is considered to be a cost effective alternative to collect needed RI data and obtain subsequent groundwater samples until D&D/excavation requires the well to be decommissioned. Following completion of D&D and soil remediation, a permanent monitoring well will be installed to replace the decommissioned well.

**Approvals:**

| | | |
|---|---|---|
| DOE Project Manager (per email 11/9/10) | 11-19-10 Date | [X] Approved [ ] Disapproved |
| EPA Project Manager | 11/23/10 Date | [X] Approved [ ] Disapproved |
| Ecology Project Manager N/A | Date | [ ] Approved [ ] Disapproved |

ATTACHMENT 1
DOE/RL-2009-41, REV. 0
Changes to Section 3.5.2.1

### *3.5.2.1. New Groundwater Wells*

Table 3-1 summarizes groundwater monitoring well activities. From the new wells screened in the Ringold upper mud unit, slug testing and pump testing will be performed to characterize hydraulic conductivity.

#### *Well Depth and Screen Placement*

For the nine new groundwater wells in the unconfined aquifer in the 100-K Area, a 6.1 m (20 ft) or longer screen will be installed.

For the four new groundwater wells reaching a total depth approximately 15 m (50 ft) within the Ringold upper mud unit, complete the boreholes as wells in a water-producing zone within the Ringold upper mud unit, if found. Up to a 6.1 m (20-ft) screen will be installed based on ability to produce water in the water-bearing Ringold upper mud unit.

#### *Well Drilling and Completion Procedures*

Well drilling will be performed in accordance with WAC 173-160. The wells will be drilled using 25.4 cm (10 in.) diameter (or larger) casing to total depth. The drilling method will be determined based on discussions between the drilling lead and drilling contractor.

Boreholes at the 116-K-2 trench completed as temporary wells, as identified in Section 3.5.1, will be constructed with 10.2 cm (4-in) PVC pipe screened over the saturated soil interval at the bottom of the borehole.

Wells 9, R3 and R4 will be constructed as temporary wells using 10.2 cm (4-in) PVC pipe. Well #9 is in an active ongoing D&D area of the 105KE reactor facility and D&D of the other nearby structures are planned to be completed this fiscal year. Well R3 is anticipated to be decommissioned within 1 year with D&D of the 183.1KE head house and well R4 is in an active ongoing remediation area at the former 183.1KW head house.

The wells, except as identified above, will be constructed as 15.2 cm (6-in.) wells with Schedule 10, Type 304 or 316, stainless steel, V-slot continuous wire wrap screen, atop a 1.5 m (5 ft) long, stainless steel sump with end cap. A Schedule 10 stainless steel riser will be used to extend the permanent well into the vadose zone, with Schedule 10 stainless steel casing through the vadose zone to ground surface. Colorado silica sand will be used for the sand pack; sodium bentonite pellets and/or natural sodium bentonite chunks, crumbles, or powdered bentonite will be used for bentonite sealing material; and Type I/ II Portland cement will be used for cement grout.

Surface construction consisting of protective casing, protective guard posts, and cement pad must be in place before job completion. The protective casing will be a minimum of 5 cm (2 in.) larger in diameter than the permanent casing. Protective casing will rise approximately 0.9 m (3 ft) above the ground surface. Permanent casing will rise to approximately 0.3 m (1 ft) below the top of the protective casing. Protective casing will have a lockable well cap extending approximately 38 cm (15 in.) above the top of the protective casing.